



The critical role of IMO member states at MEPC 80

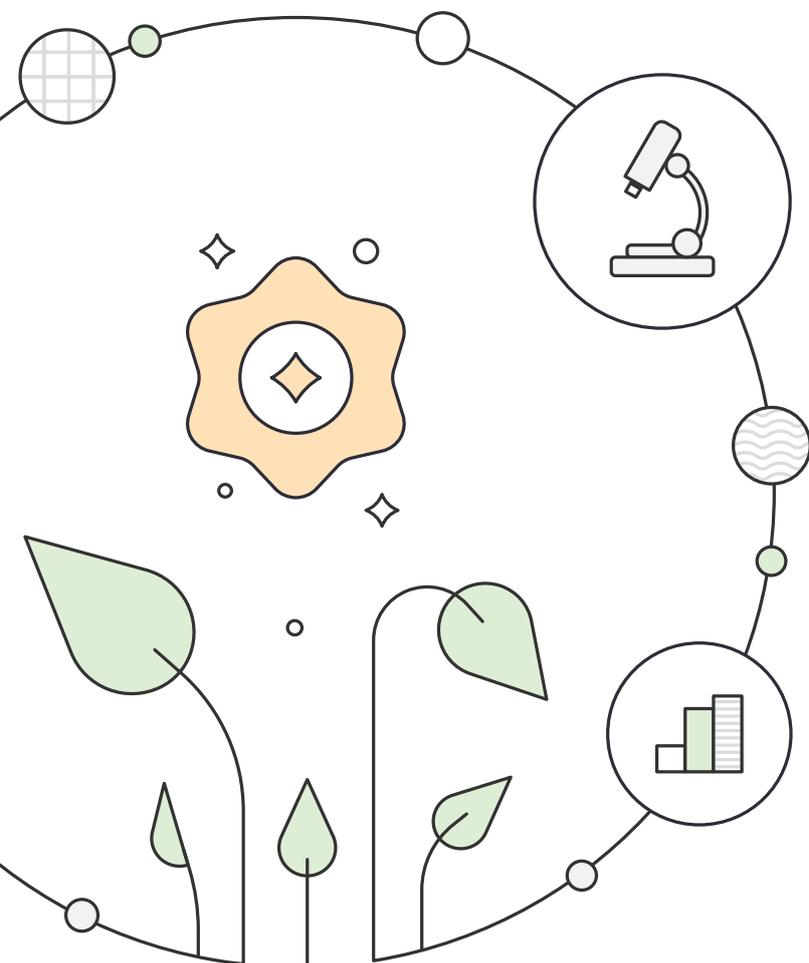
A call for ambitious action from the
Mærsk Mc-Kinney Møller Center
for Zero Carbon Shipping



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In July, at MEPC 80, the International Maritime Organization (IMO) will review its initial GHG strategy from 2018, presenting **a unique opportunity** to increase shipping's decarbonization ambitions.

At the Mærsk Mc-Kinney Møller Center for Zero Carbon Shipping (the Center), our mission is to accelerate and set the course for sustainable decarbonization of the global maritime industry by 2050. Together with our partners, we work to find decarbonization solutions and we call for the entire maritime industry to fully phase out greenhouse gas (GHG) emissions by 2050.



This document outlines our call to policymakers ahead of MEPC 80, including:

- **Committing to ambitious decarbonization targets for 2030, 2040, and 2050, aligned with IPCC 1.5°C system requirements.**
 - This means emissions must peak before 2025, decline by 45% by 2030 with respect to 2010, reach net zero by 2050, and continue to reach net negative CO₂ levels to compensate for historic emissions.¹
- **Supporting the new decarbonization targets with targeted interventions.**
 - To achieve the goal of net zero emissions on a lifecycle basis industry by 2050: The IMO member states must commit to a timeline for enforcing a combination of mid-term measures such as carbon pricing and fuel standards for GHG as soon as possible, but no later than 2028.
 - To achieve ambitious decarbonization targets for 2030 and 2040: In addition to introducing mid-term measures this decade, the IMO member states must agree on a timeline to further strengthen short-term measures to stimulate and speed up alternative fuel production and energy efficiency technologies onboard new and existing vessels.
 - To support the complete decarbonization journey: The IMO member states must adopt the guidelines on life cycle GHG intensity of marine fuels (LCA Guidelines) developed by the correspondence group and update the Data Collection System (DCS) with more data granularity and transparency.

¹ Maritime Decarbonization Strategy Report 2022, Mærsk Mc-Kinney Møller Center for Zero Carbon Shipping. <https://www.zerocarbonshipping.com/publications/maritime-decarbonization-strategy/>



The situation as we approach MEPC 80

The IPCC's most recent synthesis report delivers a clear message of caution: the pace of global surface temperature rise is surpassing any other period in the last 2,000 years, atmospheric CO₂ levels now exceed those of the past two million years, and over 3.3 billion individuals are facing significant vulnerability to the effects of climate change.²

The maritime industry is responsible for around 3% of global GHG emissions each year.³ Timely emissions reductions in the shipping industry are, therefore, both meaningful and necessary. At MEPC 80, the IMO will revise its GHG Strategy and continue to develop mid-term measures to support GHG reductions. This provides a unique opportunity to increase the shipping industry's emission reduction ambitions in line with IPCC requirements.

In the following sections of this paper, we outline the current status of the IMO GHG Strategy and mid-term measure development that will form the starting point for MEPC 80 and our position on these discussions based on our research and input from our partners. Finally, we discuss other actions that the IMO member states must continue to develop to support the shipping industry's decarbonization journey.

The GHG Strategy revision must be ambitious

Current status: The IMO's Initial GHG Strategy was adopted in 2018. It targeted a 50% reduction in GHG emissions from the maritime industry in 2050 with respect to 2008 and a 70% reduction of carbon intensity with respect to 2008. From the time of its adoption, IMO member states agreed to keep it under review, with the intention of adopting a revised IMO strategy on GHG emissions in 2023.

Starting point for MEPC 80: The lead-up to MEPC 80 in July has seen intensified dialogue between countries and non-governmental organizations and

an array of proposals concerning the updated GHG strategy. A group of countries are calling to 'phase out' GHG emissions by 2050, in line with the IPCC's requirements to reach net zero by 2050. However, there are also voices calling for a more relaxed goal in terms of timeline, for example, aiming to phase out emissions by 'mid-century, but no later than 2100', which does not align with IPCC.

Support for decarbonization "checkpoints" for 2030 and 2040 has also increased in the lead-up to MEPC 80. These checkpoints are expected to keep actions on track and to ensure following IPCC 1.5°C system requirements as we progress toward the big goal. However, there have been differing opinions about how these checkpoints should look. Among the proposals for 2030, an explicit target of 37% GHG reduction compared to 2008 has seen some support. Other countries are supporting a target of deriving 5% of the industry's energy from sustainable fuels by 2030, although opinions on which fuel types are considered "sustainable fuels" differ widely. There is currently no clear agreement around a checkpoint for 2040. While some countries are calling for reductions as high as 96% of GHG emissions compared to 2008, others are calling for targets of a 50% reduction or no targets at all.

At the Center, we argue for swift decarbonization action across industries, including shipping. We believe the maritime industry must aim for equal responsibility by addressing decarbonization in line with IPCC rather than aiming for other trajectories that may result in too little and/or too late action or even legitimize inaction. As a result, the shipping industry must decarbonize to fully phase out greenhouse gas (GHG) emissions by 2050 on a lifecycle basis and set targets for 2030 and 2040 that are aligned with IPCC requirements. Furthermore, emissions from shipping must peak this decade; we cannot compensate for delaying enablement with faster decarbonization later.

In addition, GHG targets must consider GHG emissions on a lifecycle basis to reveal the full value-chain impact of the fuel choices in the industry. The IMO has been developing lifecycle guidelines for marine fuels, which will be discussed further at MEPC 80. To support complete decarbonization, the IMO member states must adopt the Marine Fuels Lifecycle Guidelines as developed by the correspondence group.

² [AR6 Synthesis Report: Climate Change 2023, IPCC, 2023.](#)

³ Ocean shipping and shipbuilding, Organization for Economic Co-operation and Development



Mid-term measures can bring us to zero by 2050

In addition to agreeing on more ambitious GHG strategy targets, MEPC 80 will also progress the development of mid-term measures.

Current status: Mid-term measures were part of the initial outline in the IMO's GHG Strategy agreed upon in 2018. Since then, work around mid-term measures has progressed in line with the work plan outlined at MEPC 76 (June 2021), with an initial consideration period (phase 1) from 2021-2022, followed by assessment and selection (phase 2) from spring 2022 to spring 2023. Various proposals have been tabled at IMO meetings during the first two phases of this process, including technical measures to promote the uptake of alternative fuels, such as a GHG fuel standard (GFS), and economic measures to raise revenues to support the transition, such as carbon pricing. Based on these discussions, at MEPC 80, the IMO will move to phase 3, which will focus on developing and implementing these measures.

A GFS is a goal-based measure targeting at promoting the uptake of fuels with reduced GHG intensity. It is, first and foremost, a technical measure that presents predictable and transparent sustainable fuels demand to all participants in the maritime value chain (i.e., addressing asymmetric information and facilitating coordination of activities), providing long-term certainty to shipping companies and fuel producers.

A carbon pricing mechanism penalizes fossil fuels by internalizing (part of) the environmental impact. It makes new alternative fuels more attractive due to the reduced-price gap between fossil and alternative fuels. A carbon pricing mechanism also sends strong price signals encouraging shipowners and operators to improve vessel operations and energy efficiency onboard to reduce overall fuel consumption and, consequently, emissions. With the right design, it can also generate sufficient revenues to pave the way for a fair and equitable transition.

Starting point for MEPC 80: MEPC 80 is expected to provide more clarity on the next steps on both technical and economic mid-term measures, including planning and a timeline to address the principles of these measures, their potential impacts on member states, and the management and disbursement of carbon revenues. In order to start driving transition already in this decade, IMO must commit to developing these measures as soon as possible, but no later than 2028.

Multiple modeling scenario analyses performed by the Center and others have shown that introducing mid-term measures such as a GHG fuel standard and a carbon pricing mechanism (levy, feebate, emissions trading scheme, or similar) can help our industry to reach zero emissions by 2050. Furthermore, if agreed upon and implemented by the IMO, global mid-term measures will ensure a level playing field while making maritime development compatible with climate protection.

GFS (or equivalent technical measure) and carbon pricing mechanisms effectively deal with different market challenges. This means that while each measure is strong individually, they are mutually enforceable and can be combined for a greater effect. A GFS combined with an economic measure will thus increase the probability of reaching zero by 2050 and aligning with a 1.5°C pathway before 2050. IMO member states must therefore focus on fast-tracking the development of a combination of mid-term measures and commit to a timeline to enforce the mid-term measures as soon as possible in this decade.

As work progresses on developing mid-term measures, more data on ship emissions must be reported to the IMO. Proposals have been put forward calling for more granularity and transparency on vessel emissions and fuel consumption data. This would provide a better understanding of industry emissions and allow us to monitor fuel consumption behavior and the overall transition. In turn, this would enable more effective regulation designs and adjustments. Further, proposed mid-term measures call for a lifecycle assessment of fuels and the need to adopt the guidelines developed by an IMO correspondence group and submitted to MEPC 80. As such, the IMO lifecycle guidelines and the revision of the DCS to account for more granularity and transparency must be approved in this upcoming session.



Action at MEPC 80 and beyond

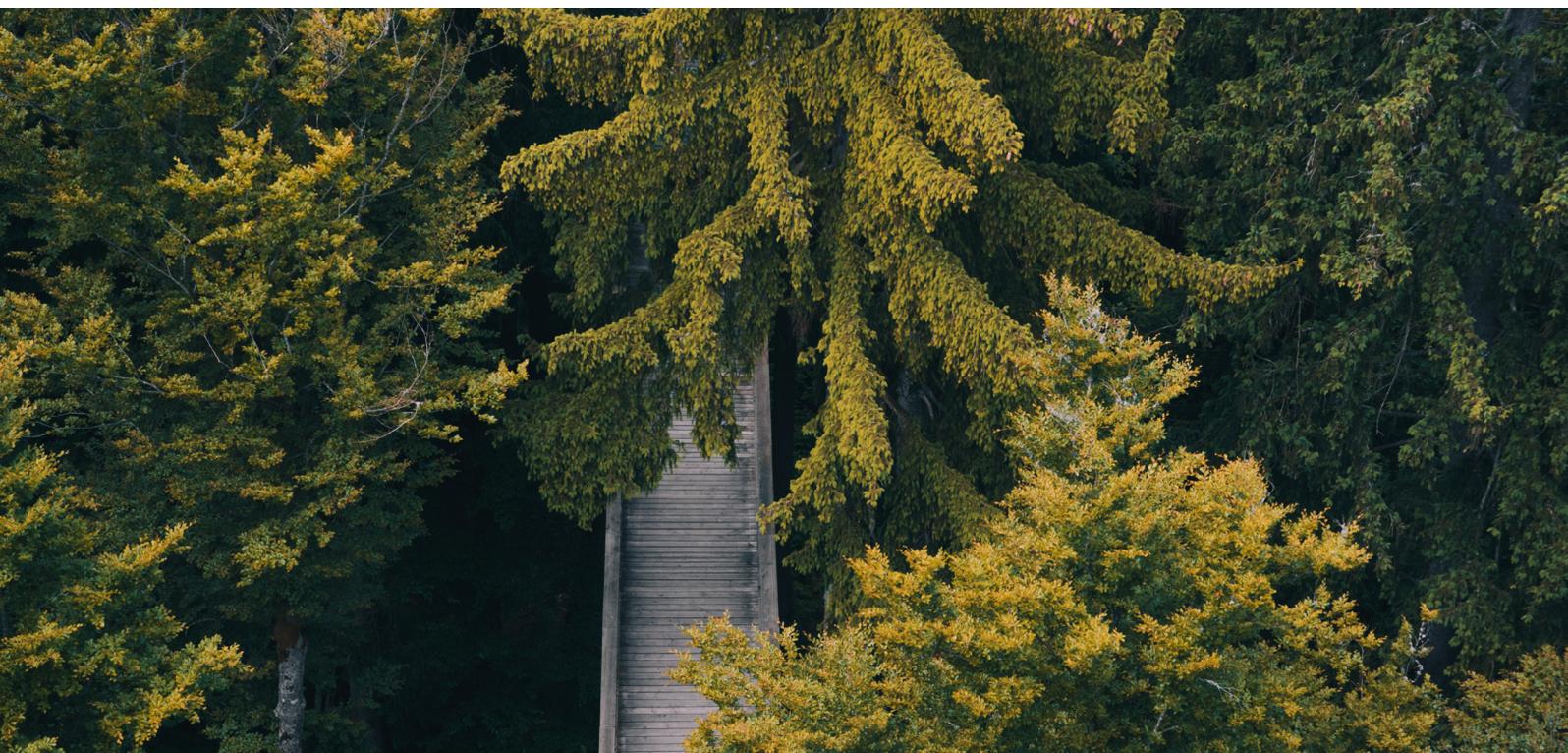
Today, our and other initiatives are driving decarbonization in shipping. However, these activities are far from enough in a world of growing trade with more than 100,000 commercial vessels. The desire for change has not yet become universal, and too many players are still pointing to shipping as a hard-to-abate sector as an excuse for inaction. As a result, there is uncertainty across the industry.

Although regional and national policymakers must also **put incentives, subsidies, and other policy frameworks in place to promote the supply and demand for -sustainable/zero-emission fuels, -technologies and measures**, as the global regulatory body, the IMO member states must seize the opportunity created by MEPC 80 to signal long-term intent for ambitious decarbonization and provide certainty for the industry.

While MEPC 80 will be crucially important for the direction of the industry, the IMO member states must also continue to develop other regulations and policies supporting the transition, including:

- Strengthening and expanding the current toolbox of short-term measures focusing on energy efficiency.
- Developing fast and transparent funding instruments to re-invest capital collected via a carbon price mechanism back into shipping while also ensuring a just and equitable transition.
- Facilitating and accelerating the development of the sustainable fuels production.
- Committing to a timeline aligned with the GHG regulatory development for safety regulations for onboard usage of future sustainable fuels.
- Continue to promote research and development of efficient technologies that have the potential to move us towards zero/low emissions but are still in various stages of development (e.g., wind propulsion, fuel cells, batteries, and others).

By committing to these targets and measures, the IMO member states can safeguard a sustainable future for our industry.





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